

CLAIMS

1. An adjustable therapeutic knee immobilization brace for controlling the degree of motion to a person's knee comprising;

a flexible sheet of cushion material adapted to wrap around a wearer's leg

5 extending above, below and encompassing the wearer's knee,

rigid upper and lower leg engagement plates fitted against the medial face of the leg above and below the knee,

an adjustable locking hinge assembly extending between and interconnecting said upper and lower leg engagement plates,

10 an adjustable pivot assembly extending between said adjustable locking leg assembly and said lower leg engagement plate,

knee stabilization means overlying said knee, and means for adjustably securing said knee immobilization brace to the wearer's leg.

2. The adjustable knee brace set forth in claim 1 wherein said rigid upper
15 and lower leg engagement plates are selectively secured to non-leg engagement surface of said sheet of cushion material.

3. The adjustable knee brace set forth in claim 1 wherein said adjustable locking hinge assembly comprises,

an upper and lower leg element extending from said respective leg
20 engagement plates, a free end of said upper leg element adjustably engaged with a free end of said lower leg element,

wherein said engagement ends have C-shaped overlapping end portions with an adjustable apertured locking assembly thereon.

4. The adjustable knee brace set forth in claim 3 wherein said apertured locking assembly comprises,

an apertured hinge block and an apertured compression cap in aligned relationship to one another,

5 fasteners extending through said apertured thereof and through an elongated opening in each of said C-shaped overlapping end portions.

5. The adjustable knee brace set forth in claim 1 wherein said adjustable pivot assembly comprises,

an apertured pivot portion extending from said adjustable locking hinge
10 overlapping an apertured free end portion of the lower leg element with a pivot pin extending therebetween, the pivot portion having a pair of oppositely disposed arcuate slots therein, the free end portion of said lower leg element has a stop fastener secured thereto, stop fastener being aligned within the arcuate slots so that when the stop fastener is tightened the respective overlapping pivot
15 end portions are locked together.

6. The adjustable knee brace set forth in claim 1 wherein said means for adjustably securing said knee immobilization brace to the wearer's leg comprises,

a plurality of non-elastic straps adjustably extending from multiple strap
20 mounting slots in said respective upper and lower leg engagement portions and strap to strap interengagement means thereon.

7. The adjustable knee brace set forth in claim 1 wherein said upper and lower leg engagement plates are transversely contoured to registerably engage the wearer's leg, and a mounting channel defined in each of said upper and lower leg engagement plates.

5 8. The adjustable knee brace set forth in claim 1 wherein said knee stabilization means comprises a knee support pad overlying the wearer's knee, positioning retaining straps extending from said knee support pad.

9. The knee brace set forth in claim 8 wherein said knee and positioning retaining straps have interengagement means thereon and are adjustably

10 secured to said respective upper and lower leg engagement plates.

10. The knee brace set forth in claims 6 and 8 wherein said strap to strap interengagement means comprises hook and loop material positioned respectively thereon.

11. The knee brace set forth in claim 6 wherein said strap mounting slots
15 further comprise,

oppositely disposed pairs of parallel spaced slots in longitudinally spaced relation on said respective upper and lower leg engagement plates.

12. The knee stabilization means set forth in claim 8 further comprises a reinforcement band secured inwardly from the perimeter edge surface thereof,

20 said band defining a knee alignment area there within.

13. The knee brace set forth in claims 1 and 7 wherein said adjustable hinge assembly further comprises,

selectively aligned apertures in said upper and lower leg elements and said respective mounting channels with said registerable fasteners there through

5 for longitudinal repositioning of said respective leg elements in said mounting channels in relation to said respective upper and lower leg plates and to one another.